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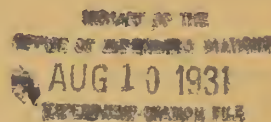
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Extension Service Circular 169

August, 1931

Program and Report of Committees  
Western States Extension Conference

Logan, Utah

July 21-25, 1931

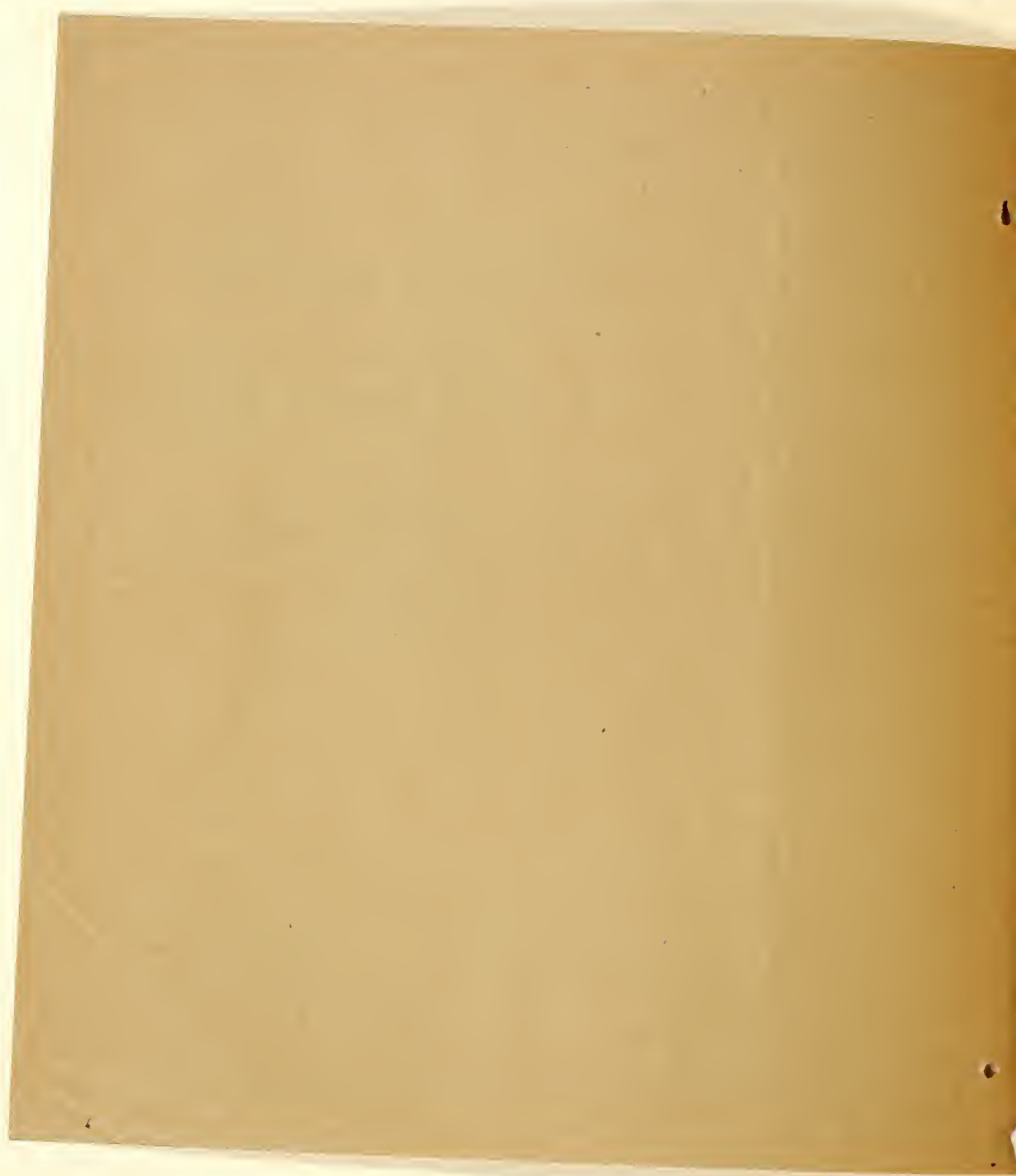


UNITED STATES DEPARTMENT OF AGRICULTURE

Extension Service.....C.W. WARBURTON *Director*

Office of Cooperative Extension Work.....C.B. SMITH *Chief*

Washington, D. C.



Cooperative Extension Work in Agriculture and Home Economics

Extension Service Circular 169

August, 1931

WESTERN STATES EXTENSION CONFERENCE

LOGAN, UTAH

JULY 21 - 25, 1931

INTRODUCTION

The annual regional extension conference of the Western Section was held at the Utah State Agricultural College, Logan, Utah, July 21 - 25, 1931. Delegates were present representing the States of Arizona, California, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Washington, Wyoming, and the Extension Service of the United States Department of Agriculture. Oregon and the Territories of Alaska and Hawaii were not represented. The following program was presented:

PROGRAM

Tuesday, July 21

Forenoon

10.00-10.20	Address of Welcome . . . . .	Dr. E. G. Peterson President Utah State Agricultural College
10.20-10.45	Purpose of Conference . . . . .	Director William Peterson
10.45-11.00	Progress Crops Projects Since Tucson Conference Director J. C. Taylor, Chairman Crops Committee	
11.00-12.00	Reports by States on Crops Projects (5 minutes each)	
	New Mexico . . . . .	G. R. Quesenberry
	Colorado . . . . .	T. G. Stewart
	Arizona. . . . .	P. H. Ross
	Nevada . . . . .	C. W. Creel
	Wyoming. . . . .	D. R. Sabin
	Washington . . . . .	Leonard Hegnauer
	Oregon . . . . .	E. R. Jackman
	Idaho. . . . .	E. J. Iddings
	California . . . . .	J. E. Coke
	Utah . . . . .	J. C. Hogenson
	Montana. . . . .	J. C. Taylor
	Hawaii . . . . .	R. A. Goff
	Appointment of committees	

**DISTRIBUTION:** A copy of this circular has been sent to each State extension director; State club leader; specialist in agronomy and farm crops; agricultural-college, and experiment-station library; and to each of the following in the Western Section - State county agent leader, home demonstration leader, and county extension agent.



Afternoon

- 2.00-2.30 Five Years 4-H Club Work in the Western States  
Miss Madge J. Reese, Field Agent, Home Demonstration &  
4-H Club Work, Western Section, Washington, D. C.
- 2.30-3.30 Reports by States on 4-H Club Work (5 minutes each)  
State 4-H Club Leaders
- 3.30-4.00 Age in Its Relationship to Extension Work  
W. A. Lloyd, In Charge Extension Work in  
Western Section, Washington, D. C.
- 4.00-4.30 Discussion of Mr. Lloyd's paper. (10 minutes each)
- California . . . . . C. W. Rubel  
Montana . . . . . C. E. Potter  
Colorado . . . . . C. W. Ferguson
- 4.30-5.00 Psychology of Adolescence . . . . . Henry Peterson  
Professor Psychology U. S. A. C.

Wednesday, July 22

Forenoon

- 9.00-9.20 Seed Improvement and Crop Standardization. . O. S. Fisher  
Extension Agronomist, U. S. Department of Agriculture,  
Washington, D. C.
- 9.20-10.30 Discussion of Mr. Fisher's paper.
- Colorado . . . . . T. G. Stewart 10 minutes  
Washington . . . . . Leonard Hegnauer 10 minutes  
New Mexico . . . . . G. R. Quesenberry  
General Discussion . . 40 minutes.
- 10.30-11.00 Social and Economic Factors of Farm Youth  
Gertrude L. Warren, Club Organization Specialist,  
Washington, D. C.
- 11.00-11.30 Conservation of the Public Domain . . . William Peterson
- 11.30-12.00 Discussion of Mr. Peterson's Paper.
- Montana . . . . . J. C. Taylor 10 minutes  
General Discussion . . 20 minutes

Afternoon

Irrigation Section

- 2.00-2.30 Pumping Irrigation Water . . . . . J. B. Brown





- 2.30-3.20 Discussion of Mr. Brown's paper.
- Utah . . . . . George D. Clyde 10 minutes
- General Discussion . . . 40 minutes.
- 3.20-3.50 Economic Use of Irrigation Water . . . W. W. McLaughlin  
Chief Irrigation Division, Bureau of Agricultural  
Engineering.
- 3.50-5.00 Discussion: (5 minutes each)
- Idaho . . . . . G. R. McDole  
Arizona . . . . . P. H. Ross  
Washington . . . . . Leonard Hegnauer  
Nevada . . . . . C. W. Creel  
Colorado. . . . . T. G. Stewart  
Utah . . . . . George D. Clyde

4-H Club Section

- 2.00-3.30 Discussion of Leadership Training (7 minutes each)
- Montana . . . . . C. E. Potter  
Wyoming . . . . . F. P. Lane  
Colorado. . . . . C. W. Ferguson  
Utah . . . . . D. P. Murray  
Arizona . . . . . H. B. Baker
- General Discussion . . . 45 minutes
- 3.30-5.00 Discussion of Scholarships, Prizes and Awards (7 minutes each)
- Idaho . . . . . J. H. Reardon  
California. . . . . F. M. Spurrier  
Washington. . . . . H. M. Walker  
Nevada. . . . . T. E. Buckman  
New Mexico. . . . . L. H. Hauter  
Oregon. . . . . H. C. Seymour  
General Discussion . . . 45 minutes

Thursday, July 23

Forenoon

- 9.00-9.40 Soils Data Available for Extension . . R. H. Davis  
Bureau of Soils
- 9.40-11.00 Reports by States on Soils Work (5 minutes each)
- New Mexico . . . . . L. H. Hauter  
Colorado . . . . . F. A. Anderson  
Arizona . . . . . P. H. Ross



Nevada . . . . . C. W. Creel  
Wyoming. . . . . A. E. Bowman  
Washington . . . . . F. E. Balmer  
Oregon . . . . . Paul V. Maris  
Idaho. . . . . G. R. McDole  
California . . . . . B. H. Crocheron  
Utah. . . . . William Peterson  
Montana. . . . . J. C. Taylor  
Hawaii . . . . . R. A. Goff

General Discussion . . . 25 minutes

11.00-11.20 Extension Work on Commercial Fertilizers . . P. V. Maris  
(Paper read by Director Peterson)

11.20-12.00 Discussion of Director Maris' paper

Idaho . . . . . G. R. McDole-10 minutes

General Discussion . . . 30 minutes

#### Afternoon

2.00-5.00 Excursion

6.30 Extension Service Banquet

Address . . . . . C. W. Warburton  
Director of Extension, Washington, D. C.

Friday, July 24

#### Forenoon

9.00-9.15 Crop Improvement Through Club Work . . . F. M. Spurrier

9.15-10.00 Discussion (5 minutes each)

Montana . . . . . C. E. Potter  
Utah . . . . . J. C. Hogenson  
Nevada. . . . . J. H. Wittwer

General Discussion . . . 30 minutes

10.00-10.15 Extension Work on Alfalfa and Irrigated Pastures  
T. G. Stewart

10.15-11.00 Discussion (5 minutes each)

Oregon . . . . . E. R. Jackman  
Wyoming. . . . . D. R. Sabin  
Arizona. . . . . P. H. Ross

General Discussion . . . 30 minutes



11.00-11.20 Weed Control in Hawaii . . . . . Roy A. Goff  
11.20-11.35 Extension Work on Weed Control . . . . . R. S. Bristol  
11.35-12.00 Discussion (5 minutes each)  
California . . . . . J. E. Coke  
New Mexico . . . . . G. R. Quesenberry  
General Discussion . . . 15 minutes

Afternoon

2.00-2.30 Address . . . . . C. W. Warburton  
2.30-5.00 Extension Director's Section . . . . . Open  
2.30-5.00 4-H Club Section . . . . . Open

Saturday, July 25

9.00 Committee reports

Special conference committees were appointed on boys' and girls' club work, soils, weeds, and fertilizers. The reports of these committees appear on pages 6 through 11 of this circular.

In view of the seriousness of weed encroachment in cultivated fields and pastures, particularly on lands under irrigation, a permanent weed committee was appointed to promote investigational, extension, and control work and to crystalize sentiment for legislation, State and Federal. The following constitute the committee: William Peterson, Utah, Chairman; J. C. Taylor, Montana; Cecil Creel, Nevada; P. H. Ross, Arizona; and B. H. Crocheron, California.

The time and place of meeting of the next regional conference will be determined at the time of the Land-Grant College meeting in November, 1931.

Program committee:

William Peterson, Chairman.  
Cecil Creel.  
A. E. Anderson.  
W. A. Lloyd.



## REPORTS OF COMMITTEES

### Report of Subcommittee on Soils

The soils problems embrace both irrigated and nonirrigated soils in the Western States. These problems vary considerably and will be treated separately. In all areas, weed eradication, moisture and fertility conservation, and crop rotation are of vital importance and have been considered by other committees.

#### I. Some of the soil problems under irrigation:

- a. Alkali.
- b. Moisture conservation.
- c. Drainage.
- d. Leveling.
- e. Tillage.
- f. Organic matter.
- g. Soil surveys.

(a) It is felt that the real alkali problem at the present time is not the reclamation of large areas of alkali land, but the elimination of alkali spots from tilled fields and the prevention of further spread of alkali on to productive soils. As a check on this encroachment, tests for alkali should be encouraged. More investigational work along this line is needed, but the facts now available on this important problem should be brought more forcefully to the attention of the farmers by extension workers.

(b) Investigations on the proper utilization of irrigation water should be continued and the facts now known made available. The concentration of water to better lands and the elimination of marginal acres should be encouraged and emphasized.

(c) Drainage is a problem which is increasing in importance as the years go by. This problem can be handled partly by judicious use of irrigation water. In the coast section, where the precipitation is heavy, permanent tile drainage is extremely important and needs extension encouragement.

(d) Leveling of land to be irrigated is of importance in order to conserve water and to insure its even distribution over the land. This should be encouraged.

(e) Farmers should be encouraged to cultivate their soils more intensely to prevent the dissipation of moisture and plant food by weeds.

(f) The addition of organic matter to impervious soils has shown excellent results in several of the Western States. To further extend this practice, it is suggested that more judicious use of barnyard manure and the planting of green-manure crops be encouraged.

(g) Soil surveys should be extended, simplified, studied, and used by more extension workers.







## II. Nonirrigated lands:

The serious problem of fertility and moisture losses through wind and water erosion and resultant crop-yield decreases is recognized.

### (a) Problems:

1. Soil blowing.
2. Sheet erosion on all lands.
3. Gullying on the steeper lands.
4. Absence of legumes in crop rotations.

### (b) Objects:

To keep soil in place and to retain and increase moisture and fertility.

### (c) Goal:

To give demonstrations in all counties where such practices are applicable.

### Methods recommended:

- a. Inclusion of legumes in crop rotations.
- b. Use of tillage implements that leave the surface soil in a cloddy condition.
- c. Level terraces and contour planting.
- d. Soil-saving dams where gullying has started.
- e. Further research.

Respectfully submitted,

G. R. Quesenberry, Chairman.  
Leonard Hegnauer.  
J. C. Hogenson.

## Report of Subcommittee on Fertilizers

The committee believes that the matter of soil fertilization, particularly the use of commercial fertilizer, will become increasingly important within the next few years, both because of the desire of farmers to increase yields, and because of the multiplied sales effort on the part of concerns manufacturing commercial fertilizer.



In view of this we believe there is real need for a better-organized and intensively prosecuted campaign of education on the part of extension agents on the real functions and uses of fertilizer, so that the farmer can better understand what is to be expected of commercial fertilizers and be better prepared to cope with the fertilizer salesman.

Experience indicates that fertilizer gives extremely varying results under different soil, climatic, and crop conditions. Therefore, any recommendations regarding the use of fertilizer should be based upon a considerable number of local tests extending over a period of years. These tests should be uncomplicated, using a few simple rather than complete fertilizers so placed that yield data can be readily procured, and be replicated. Emphasis should be placed on this matter of replication. The efficiency of this work will be increased if a uniform plan of tests is adopted in each State.

Fertilizer tests should be laid out only after a careful study of available soil surveys and of any other data or history bearing on the soils or crops in the locality.

Western soils are generally deficient in organic matter. A permanent agriculture can be maintained only by maintaining or increasing the organic matter in the soil. Commercial fertilizer can not be expected to take the place of organic matter.

The committee believes that in general it is unwise for extension agents to accept donations of fertilizer from commercial concerns for use in trials.

Complete independence in interpreting and reporting results is essential. Where a commercial concern donates material for trial it has an ethical right to collect, interpret, and report results as suits its inclinations.

Respectfully submitted,

J. E. Wittwer.  
G. R. McDole.  
C. W. Rubel.

#### Report of Subcommittee on Weeds

The committee on the weed problem, as found in the 11 Western States, hopes to impress upon the conference the very great importance of this problem in the agriculture of the west. Especially is the situation serious in the irrigated regions, where both the large distribution canals and the laterals serve as means of spreading infestation, originally small, over a considerable area, embracing a large number of individual farms. Roadsides, ditch banks, and other public property become infested and



serve as a means of dissemination. Even in the nonirrigated sections such weeds as morning-glory, Canadian thistle, fanweed, and others are found widely distributed and in some regions cover a considerable portion of individual farms.

The weed problem, therefore, becomes one of the factors controlling the agricultural output. Your committee feels that the situation is exceedingly serious and fully deserving of the best efforts of the extension services of the various States.

We make the following recommendations:

I. We find that legislation having to do with the control of weeds varies among the States. Some of the States have enacted legislation permitting counties to establish weed districts, either covering a portion of the county or the entire county, with authority given to the county commissioners or other county governing body to declare certain weeds to be noxious and to put into operation an eradication program. It is reported from some of the States that some lands which are infested and serve as a means of further distribution do not have sufficient value to justify the cost of weed elimination. Furthermore, in the irrigated regions the weed problem on the farm is of far greater importance than the success of that particular farm, since one farm may serve as a medium of bringing an infestation to a large district. Your committee, therefore, recommends that the extension services of the States give serious consideration to and use such efforts as are properly within the province of an extension service, to further the development of policies and the enactment of legislation that will provide for the sharing of costs of weed eradication by the State, the county, and the individual.

In some of the States, the regulatory authority has been so active in weed control as to minimize the efforts of the agricultural agents. Your committee feels that while either State or county authorities should enforce spraying or other control regulations, the educational phases of weed work can be most effectively handled by the extension service, and suggests that there should be such division of authority as will permit the extension service to have its proper place in this exceedingly important line of work.

II. The weed problem, if not already, is rapidly becoming one of national importance. Some of the States have put forth great effort both in the field of research and in that of extension. It would be entirely proper in a problem of this magnitude to have Federal assistance, and we especially suggest that the Bureau of Plant Industry, United States Department of Agriculture, be urged to render aid in this situation through cooperative research undertakings with the States.

III. Reports from the States indicate that a fully satisfactory knowledge is not available upon the growth habits of weeds, effect of chemicals, effective rates of chemical application, most suitable seasonal attack, and the value and effectiveness of cultivation. Furthermore, the extension services must take into consideration the effects of the





depression period and the lack of funds in farm communities for extensive programs. We recommend conservatism, therefore, in the undertaking of extensive and costly programs of weed eradication. It is possible that in some districts, where chemical and other similar methods of attack seem impracticable, that good cultural practices may serve to keep weed infestations under control until a more effective program can be developed. While some of the States report success with cultivation, a number of the States have found this method of control quite ineffective when applied by the average farm operator.

IV. We recommend that all of the States give weed work a prominent place in the plan of work of the extension service. There undoubtedly is need of much effort to acquaint farmers and the public in general with the weeds that are regarded as noxious, and with the importance of weed control to the ultimate success of farming. Your committee feels that the extension service should cooperate with State and county agencies in educational efforts where there is a possibility of achieving good results by that method. We recommend, however, that extension agents avoid taking responsibility for such weed work as may be classed in the regulatory field of activity. By this we mean that county agents should not assume the responsibility of carrying into effect measures designed to force individual farmers and cooperators to comply with legal provisions and control regulations.

V. We recommend to the experiment stations of the various States that further research be conducted of all the factors concerned with the weed problem. There is need of further knowledge of the habits of growth of noxious weeds, the relation of soil to weed control, the place of cultivation in destroying weeds; and especially is there need of additional facts with reference to the place of chemicals in weed eradication. It is hoped that there may be found new chemical agencies that will be less costly in application and equally if not more effective.

Judging from the reports of the States, the chlorates and carbon bisulphide have been found most effective of the chemical agencies. Carbon bisulphide, while more expensive, is justifiable when used to exterminate small patches, and when applied under proper conditions can be depended upon for practically 100 per cent eradication.

Respectfully submitted,

F. E. Balmer,  
D. R. Sabin.  
E. J. Iddings.





Report of Committee on Boys' and Girls' Club Work

We recommend:

1. That each State make a more definite effort to work with the older group of young people, and that a progress summary be made in the annual report.
2. That all extension workers who are responsible for club work review the paper presented by Miss Warren, entitled "Some Fundamental Needs Based on Analysis of the Social and Economic Problems of the Farm Youth."
3. That Mr. Lloyd continue his study regarding the methods of extension work with young men and women; that Miss Reese keep up from year to year studies similar to that undertaken in "Five Years of Boys' and Girls' Club Work in the Western Section," and that Miss Warren continue to keep us informed on the economic and social trends affecting rural youth.
4. That Mr. Lloyd make a study of reasons why our older group of club members discontinue their work upon reaching the age of young manhood and young womanhood. Furthermore, that information be obtained regarding the work being done by the extension service, directly or indirectly, in developing rural leadership among our young people.
5. That more emphasis be placed on the quality and percentage of completions.
6. That each State report its standard of completions to Miss Reese and that a compilation be made for the Western Section.
7. That all prizes, awards, or scholarships, offered by educational and commercial institutions from outside our respective States, be referred to the extension committee on organization and policy of the Land-Grant College Association for its approval before being considered for adoption by the respective States.
8. That the State extension service give more recognition to volunteer club leaders.
9. That the Western Section continue to emphasize the demonstrational feature in boys' and girls' club work.

Committee:

Charles E. Potter, Chairman.  
Myrtle Davidson.  
C. W. Ferguson.





